

# SONY®

PAL/NTSC

Network Mini Dome Cameras

## SNC-DF Series



SNC-DF40N  
SNC-DF40P  
SNC-DF70N  
SNC-DF70P

Connect Your Vision

# IPELA™

# IPELA

Stunning video and audio brought to you by "IPELA" fashions the novel reality for the modern businessperson. Sharing ideas and dreams as if you are collocated when your counterpart is half-way around the world, experiencing images as if you are actually there, this is "IPELA." Real audiovisual communication over networks - this is business communication of the future, this is business communication brought to you today, this is "IPELA."

## Choose From the Sony High-Performance Mini Dome Camera Lineup to Meet Your Monitoring Needs – Ranging From Indoor to Outdoor, 24-hour Monitoring Applications.

Sony introduces new additions to its line of surveillance mini dome cameras – SNC-DF40\*<sup>1</sup> and SNC-DF70\*<sup>2</sup> Network Cameras. The compact dome design of the SNC-DF Series preserves a discreet appearance and is ideal for use in building entrances, schools, offices, retail stores and shopping malls.

The SNC-DF Series incorporates a built-in web server and network interface, which enables users to control the cameras and monitor images over a Network. These cameras utilize both MPEG-4 and JPEG compression formats, allowing for both smooth video/audio streaming and providing high-quality still images over a wide range of network bandwidths.

What's more, this series of cameras incorporate an external microphone input, and an audio line output for active speakers, allowing for audio monitoring and audible warnings at the monitoring site.

To meet a wide range of monitoring needs, the SNC-DF70 features a Day/Night capability in a durable aluminum diecast construction with an IP-66 rating, ideal for 24-hour outdoor surveillance applications.

\*<sup>1</sup> The "SNC-DF40" refers to both the SNC-DF40N (NTSC model) and the SNC-DF40P (PAL model).

\*<sup>2</sup> The "SNC-DF70" refers to both the SNC-DF70N (NTSC model) and the SNC-DF70P (PAL model).

## FEATURES



### All-in-one Network Mini Dome Camera

The SNC-DF Series incorporates a built-in web server and a 100Base-TX/10Base-T network interface in a compact dome design, allowing users to monitor live images and control cameras from a PC running a standard web browser; additional software or plug-ins are not needed. Its compact, discreet appearance is ideal where less noticeable video cameras are preferred.



Viewer

### Superior Picture Quality

The SNC-DF Series incorporates a 1/4-type Super HAD™ CCD that achieves high-horizontal resolution of 480 TV lines and high sensitivity. The CCD imager provides a minimum illumination of 0.8 lx at F1.0 (SNC-DF40)/0.9 lx at F1.0 (SNC-DF70), enabling the cameras to capture clear images even under low light conditions.

## MPEG-4 and JPEG Compression Formats

The SNC-DF Series supports both the MPEG-4 and JPEG compression formats. The high compression ratio of MPEG-4 provides smooth moving images over networks even when bandwidth is limited. If higher quality still images are preferred, then the industry standard JPEG compression format is selectable from the setup menu. The SNC-DF Series also supports variable bit rates up to 2Mb/s.

Image size can be selected from six modes: 640 x 480, 480 x 360, 384 x 288, 320 x 240, 256 x 192, and 160 x 120.

## High Frame Rate

The SNC-DF Series produces images at a maximum frame rate of 30fps (NTSC) /25fps (PAL)<sup>\*3</sup> when the image size is 320 x 240 in both MPEG-4 and JPEG modes, producing clear and smooth-moving images.

<sup>\*3</sup> In order to view images at the maximum frame rate, adequate PC processing power and network bandwidth are required.

## Audio Monitoring

Incorporating an external microphone input, the SNC-DF Series is capable of picking up sound from camera site clearly. The unit is also equipped with an audio line output for active speakers; allowing users to communicate with the remote site, expanding the capability of remote monitoring applications.

## Day/Night Function (SNC-DF70)

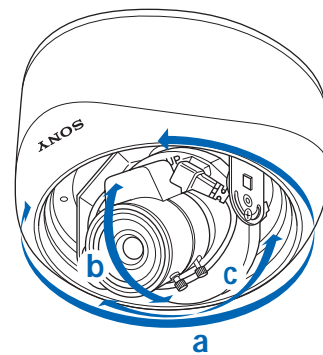
The SNC-DF70 features a "Day/Night" capability, which provides optimized sensitivity in both day and night shooting applications. As the scene darkens, an infrared filter is automatically replaced with a clear filter and the camera switches to B&W mode, allowing for operation at a minimum illumination of 0.2 lx at F1.0, or 0 lx<sup>\*4</sup> using an IR Illuminator from 3rd party vendors<sup>\*5</sup>.

<sup>\*4</sup> 0 lx means absence of visible light to the naked eye.

<sup>\*5</sup> Please contact your local Sony dealers for 3rd-party item.

## Easy Mounting and Flexible Installation

The SNC-DF Series can be wall-mounted or ceiling-mounted with the supplied ceiling-mount bracket. What's more, the 2.7x vari-focal lens incorporated into these cameras can be freely rotated, allowing for easy adjustment of the camera's viewing angle after installation.



**a** (Panning):  $\pm 150^\circ$

**b** (Tilting):  $\pm 75^\circ$

**c** (Rotating):  $\pm 150^\circ$

Adjustment range of lens angle



Ceiling Surface Mount (SNC-DF40)



Ceiling Flush Mount (SNC-DF40)

<sup>\*</sup>Optional YT-ICB40 Ceiling-mount bracket is required.

## Ruggedized Design (SNC-DF70)

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The SNC-DF70 is specially designed to be used for outdoor surveillance or indoors for vandal resistant applications. The cameras are housed in a heavy-duty aluminum die cast enclosure with a durable polycarbonate viewing window. These cameras comply with the IP66<sup>\*6</sup> standard for protection against water and dust.

<sup>\*6</sup> Ingress Protection (IP) standard is a system for numerically classifying the degree of protection provided by enclosures of electrical equipment against solid objects and liquids. IP66 means there is no ingress of dust and the equipment is protected against powerful water jets.

## Network Features

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### Adaptive Rate Control

To meet Quality of Service (QoS) requirements over a network, the SNC-DF Series provides an adaptive rate control function. This function automatically varies the bit rate of audio and video data to meet changing network conditions and selects the most appropriate frame rates. This function helps prevent audio and video breakup.

### Multicasting Capability

The SNC-DF Series has a built-in multicasting capability that enables efficient video and audio streaming to a large number of users.

### Simultaneous Access

Up to 20 (JPEG mode)/10 (MPEG-4 mode) users can simultaneously access any of the SNC-DF Series cameras and monitor images separately.

### Network Security Features

Access to the SNC-DF Series can be restricted to one or more groups of selected users. Up to ten different groups can be established by defining an IP address range for each group. In addition, user names and passwords can be assigned to allow three levels of access. The administrator has complete access/control of the cameras; while the other two levels of access can be set to limit user privileges to functions such as viewing, trigger control, etc.

## Alarm Functions

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### Motion Detection<sup>\*7</sup>/Alarm Trigger

The SNC-DF Series is equipped with a built-in motion detection function that can generate an alarm through its alarm-output port or trigger another device to perform a variety of actions. The motion detection function uses vector information to detect motion so that unwanted noise components do not accidentally trigger the alarm. In addition to these features, the SNC-DF Series is equipped with a sensor-input port that can receive a trigger from an external sensor.

<sup>\*7</sup> The motion detection function is available only with MPEG-4 compression.

### Pre-/Post-Alarm Image Storage

With a built-in buffer memory, the SNC-DF Series can store several seconds of pre-alarm and post-alarm still images when an alarm is triggered by the motion detection function, the alarm input, or both.

#### Image storage capacity

MPEG 4 image: Approx. 15 s\* (pre-/post- 7.5 s)

\*when the image size is 320 x 240 at a frame rate of 30fps and a bit rate of 512 kbps

JPEG image: Approx. 10 s\* (pre-/post- 5 s)

\*when the image size is 320 x 240 at a frame rate of 15fps and the image quality is set to Level 3

### Image Transfer Using FTP/SMTP<sup>\*8</sup>

All of the pre-/post-alarm images stored at the time of an alarm event can be transferred to an FTP server for later viewing. Also, the still image captured at the time of an alarm event can be sent to a designated e-mail address.

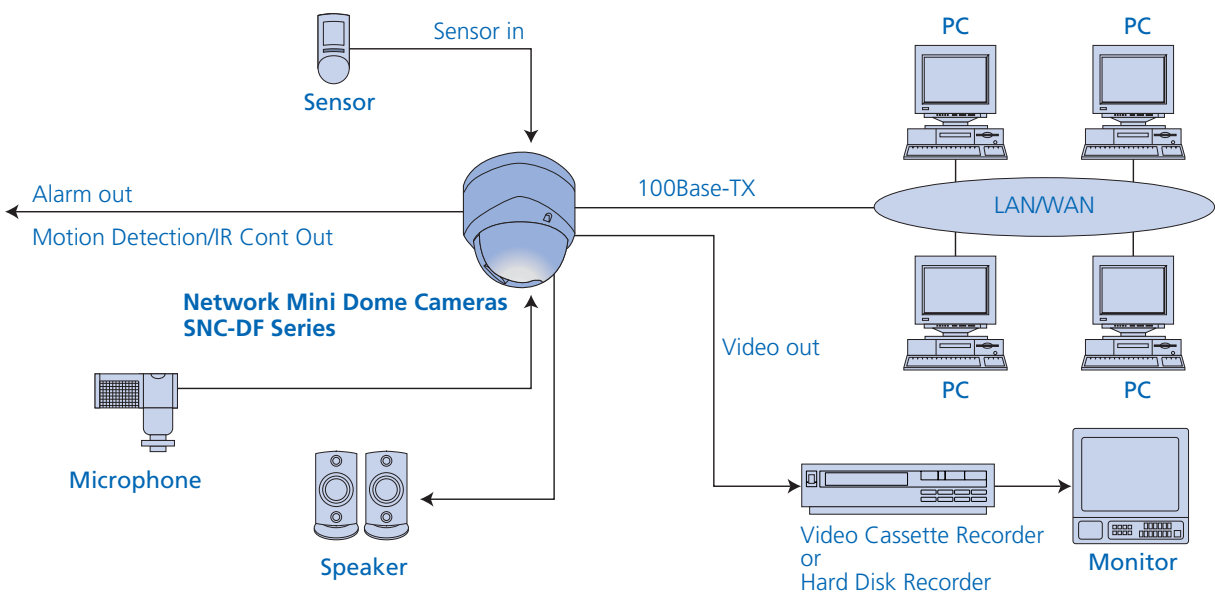
<sup>\*8</sup> All images transferred using SMTP are in JPEG format.

## Analog Composite Video Output

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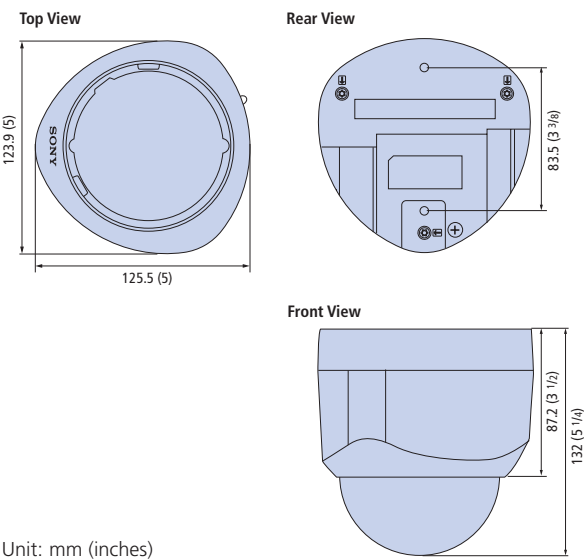
The SNC-DF Series is equipped with an analog composite video output, allowing camera images to be directly recorded or monitored by connecting video equipment such as time-lapse recorders, hard disk recorders, and monitors.

# SYSTEM CONFIGURATION



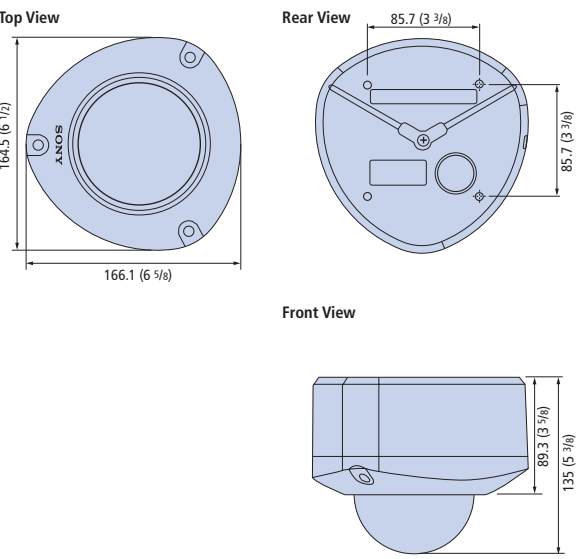
## DIMENSIONS

### SNC-DF40N/SNC-DF40P



Unit: mm (inches)

### SNC-DF70N/SNC-DF70P



## OPTIONAL ACCESSORIES



**YT-ICB40**  
Ceiling-mount bracket for  
SNC-DF40N/SNC-DF40P

**YT-ICB70**  
Ceiling-mount bracket for  
SNC-DF70N/SNC-DF70P

## REAR PANEL LAYOUT



SNC-DF40N/SNC-DF40P

# SPECIFICATIONS

	SNC-DF40N	SNC-DF40P	SNC-DF70N	SNC-DF70P
Camera				
Image device	1/4-type Super HAD CCD			
Number of effective pixels (H x V)	380,000 (768 X 494)	440,000 (752 X 582)	380,000 (768 X 494)	440,000 (752 X 582)
Electronic shutter	1/60 to 1/100,000 s	1/50 to 1/100,000 s	1/60 to 1/100,000 s	1/50 to 1/100,000 s
Gain control	AUTO/MANUAL			
Exposure control	Auto, Manual, Back-Light-Compensation (BLC)			
White balance mode	ATW			
Lens mount	CS mount			
Lens type	x2.7 Vari-focal auto iris lens			
Horizontal viewing angle	66.6 to 26.9 degrees			
Focal length	f=3.0 to 8.0 mm			
F number	F=1.0 (Wide), F1.4 (Tele)			
Iris	CCD iris			
Other functions	Motion detection		Motion detection, Day/Night	
Image				
Image size (H x V)	640 x 480, 480 x 360, 384 x 288, 320 x 240, 256 x 192, 160 x 120			
Compression format	MPEG-4/JPEG selectable			
Maximum frame rate (MPEG-4 mode)	Max. 30 fps (320 x 240)	Max. 25 fps (320 x 240)	Max. 30 fps (320 x 240)	Max. 25 fps (320 x 240)
(JPEG mode)	Max. 30 fps (320 x 240)	Max. 25 fps (320 x 240)	Max. 30 fps (320 x 240)	Max. 25 fps (320 x 240)
Audio				
Compression format	G.711 (64 Kbps) / G.726 (40, 32, 24, 16 Kbps)			
Network				
Protocols	TCP/IP, UDP, RTP, RTCP, ARP, ICMP, DHCP, DNS, HTTP, FTP, SMTP, NTP, SNMP (M1B2), PPPoE			
Number of clients	JPEG: 20 users, MPEG-4: 10 users			
Interface				
Ethernet	100Base-TX/10Base-T (RJ-45)			
Analog video output	BNC, 1.0 Vp-p, 75 Ω, unbalanced, sync negative			
I/O port	Sensor in (1), Alarm out (2)			
External microphone input	Mini-jack, 2.4 VDC plug-in power, 4.7 kΩ			
Audio line output	Mini-jack (Monoaural), max output level: 1 Vrms			
Analog video output				
Signal system	NTSC (Composite)	PAL (Composite)	NTSC (Composite)	PAL (Composite)
Horizontal resolution	480 TV lines			
S/N ratio	more than 50 dB			
Minimum illumination (Color)	0.8 lx (AGC On, F1.0, 50IRE)		0.9 lx (AGC On, F1.0, 50IRE)	
(Black and White)	—		0.2 lx (AGC On, F1.0)	
General				
Mass	Approx. 750 g (1 lb 10 oz)		Approx. 1,500 g (3 lb 5 oz)	
Dimensions (W x H x D)	124 x 132 x 126 mm (5 x 5 1/4 x 5 inches) without projection ports		165 x 135 x 166 mm (6 1/2 x 5 3/8 x 6 5/8 inches) without projection ports	
Power requirements	AC24 V 50/60 Hz, DC12 V,POE			
Power consumption	7.5 W		8.0 W	
Operating temperature	-10 to +50 °C (14 to 122 °F)			
Storage temperature	-20 to +60 °C (-4 to +140 °F)			
Operating humidity	20 to 80%, non-condensing			
Storage humidity	20 to 95%, non-condensing			
Supplied accessories				
	CD-ROM (setup program, users guide), Monitor cables (2), AC power code, Wire rope, Screws (2), Dome cover screw, Installation manual		CD-ROM (setup program, users guide), Monitor cables (2), AC power code, Wire rope, Screws (2), Installation manual	
System requirements				
Operating system	Microsoft® Windows® 2000/XP			
Processor	Intel® Pentium® III, 1 GHz or higher (Recommendation: Pentium IV, 2GHz or higher)			
Memory	256 MB RAM minimum			
Web browser	Microsoft Internet Explorer® version 5.5 or 6.0			

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